

Remarks

Reconsideration of the subject application in view of the present amendment is respectfully requested.

By the present amendment, claims 3, 5, 6, and 8 have been amended.

Based on the foregoing amendments and the following remarks, the application is deemed to be condition for allowance, and action to that end is respectfully requested.

I. Rejection of Claims Under 35 U.S.C. §112.

The Examiner has rejected claims 6 and 8 under 35 U.S.C. §112, first paragraph, as being non enabling. Claims 6 and 8 have been amended to overcome such rejection. Moreover, regarding the rejection of claim 6, it should be noted that every mechanical system has its own natural mechanical resonance dependent on dimension, rigidity, density, etc.. Tuning this resonance inside a possible range to a given frequency (first natural vibration of the piezo actor) is routine work for construction engineers. The specification, thus, at p. 5, l.18 - p. 6, l.4; p. 8, l.12-14) contain sufficient disclosure to explain the subject matter claimed in claim 6. Further, regarding claim 8, the counter 12 counts the detected natural vibration peaks of the piezo actor up to count n before the next pulse is created (p. 6, l.9-11; p.7,

1.15-16). Accordingly, based on the above remarks, withdrawal of the rejection to such claims and allowance of such claims is respectfully requested.

The Examiner has rejected claims 3, 5 and 6 under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. Such claims have been amended to overcome such rejection. Moreover, regarding claim 3, the damping value of every damping means is dependent on the frequency. Tuning this value inside a possible range to a given frequency (vibration of the housing) is routine work for construction engineers. Further, with regard to claim 6, the “vibration coupled piezo actor-housing-system consists only of the piezo actor and the housing (including any chuck) because both parts are connected rigidly together at the rear end of the piezo actor and each of the parts is rigid enough in and of itself for vibrating. Only in this manner is a longitudinal wave resonator built (p. 5, 1.1-3; arrows in fig. 1). Accordingly, based on the above remarks, withdrawal of the rejection to such claims and allowance of such claims is respectfully requested.

II. Rejection Over the Prior Art.

The Examiner rejected claims 1 and 5 under 35 U.S.C. §102(b) as being anticipated by DE 19830415 (DE ‘415). Claims 2-3 were rejected under 35 U.S.C. §103(a) as being unpatentable over DE’ 415 and claim 4 as being unpatentable over

DE '415 in view of U.S. Patent No. 6,286,610 to Berger et al. (Berger). It is respectfully submitted that the claims 1, 2-4 and 5 are patentable over the prior art, including all of the prior art of record in this application.

DE '415 does not show any hand-held electrical tool but only a probe penetrating the earth. For this device, using the vibrating of the probe as a whole is necessary. In contradistinction, for the function of a hand-tool any vibration at the necessary handle is wrong. The vibrating ear (pos 28) referred to by the Examiner is used for connecting the part to penetrate the earth and thus not similar to a handle of a hand held tool because of the vibrating ear's strong vibrations. No one skilled in the art in view of the teachings of the '415 patent would change the ear with a handle. The disclosure would teach one skilled in the art to fix a handle at the strong vibrating position and thus teach away from the inventive solution.

A rejection based on U.S.C. § 102 as in the present case, requires that the cited reference disclose each and every element covered by the claim.

Electro Medical Systems S.A. v. Cooper Life Sciences, 32 U.S.P.Q. 2d 1017, 1019 (Fed. Cir. 1994); *Lewmar Marine Inc. v. Barient Inc.*, 3 U.S.P.Q. 2d 1766, 1767-68 (Fed. Cir. 1987); *Verdegaal Bros., Inc. v. Union Oil Co.*, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). The Federal Circuit has mandated that 35 U.S.C. § 102 requires no less than "complete anticipation . . .

[a]nticipation requires the presence in a single prior art disclosure of all

elements of a claimed invention arranged as in the claim.” Connell v. Sears, Roebuck & Co., 220 U.S.P.Q. 193, 198 (Fed. Cir. 1983); See also, Electro Medical Systems, 32 U.S.P.Q. 2d at 1019; Verdegaal Bros., 2 U.S.P.Q. 2d at 1053.

Since DE ‘415 fails to disclose each and every feature of independent claim 1, DE ‘415, as a matter of law, does not anticipate the present invention, as defined by said independent claim. In view of the above, it is respectfully submitted that DE ‘415 does not anticipate or make obvious the present invention as defined in claim 1, and claim 1 and claim 5 that depends therefrom is patentable over DE ‘415.

Under MPEP § 2143 *prima facie* case of obviousness requires that three basic criteria be met. First, there must be some suggestion or motivation, either in the references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitation.

It is respectfully submitted that the first element of *prima facie* obviousness has not been established.

“Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggesting supporting the combination. Under section 103, teachings of references can be combined only if there is some suggesting or incentive to do so.”

In re Fritch, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir 1992) (footnote omitted) (emphasis in original). See also *In re Sernaker*, 217 U.S.P.Q. 1, 6 (Fed. Cir. 1983): *SmithKline Diagnostics, Inc. v. Helena Laboratories Corp.*, 8 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989); *In re Fine*, 5 U.S.P.Q. 2d 1596, 1598 (Fed. Cir. 1988).

There is no suggestion, incentive or motivation in the cited references for the combination on which the Office Action relies. A statement that it would have been obvious to one skilled in the art to make modifications to the references is not sufficient to establish a *prima facie* case of obviousness. MPEP §2143.01 relying on *Ex Parte Levengood*, 28 U.S.P.Q. 2d 1300 (Bd. Pat. App. & Inter. 1993). In order to establish a *prima facie* case of obviousness, “it is necessary for the Examiner to present evidence, preferably in the form of some teaching, suggesting incentive or influence in the prior art, or in the form of generally available knowledge, that one having ordinary skill in the art would have been led to combine the relevant teachings.” *Id.* at 1301 (emphasis in original).

The Court of Appeals for Federal Circuit has held that a claimed invention was not obvious, where “[c]onspicuously missing from [the] record as any *evidence*, other than the PTO’s speculation (if it be called evidence) that one skilled in the art would have been motivated to make the modification of the prior art “necessary to arrived at the claimed invention. *In re Jones* 21

U.S.P.Q. 2d 1941 (Fed. Cir. 1992).

Ex Parte Clapp, 227 U.S.P.Q. 972, 973 (Bd. Pat. App & Inter. 1985) requires that when the references do not suggest the invention “. . . the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teaching of the references.” No such line of reasoning is seen in the Office Action.

The Court of Appeals for the Federal Court clearly stated:

It is impermissible to use the claimed invention as an instruction manual or template to piece together the teaching of the prior art so that the claimed invention is rendered obvious.

In re Fritch, 23 U.S.P.Q. 2d 1780, 23 1780, 1783 (Fed. Cir. 1992)

In the *In re Fritch* holding only confirmed a long established view that obviousness should not be read “into an invention on the basis of Applicants’ own statements”, that the prior art must be viewed “without reading into that art Appellant’s teachings”, an that that teachings of the prior should, “in and of themselves and without the benefits of Appellant’s disclosure (emphasis in

the original text) make the invention as a whole, obviously.” In *re Spinnoble*, 160 U.S.P.Q. 237, 243 (CCPA 1969). It is respectfully submitted that the teachings of the prior art does not make the present invention obvious.

The Court of Appeals for the Federal Circuit has consistently ruled that it is not permissible to use hindsight to reject a claim.

As pointed out in *Uniroyal v. Redkin-Willey*, 5 U.S.P.Q. 2d 1434, 1438 (Fed. Cir. 1988):

When prior art references require selective combination by the Court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. . . .

Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination.

There is nothing in the prior art that would suggest combining such references to achieve the claimed invention.

In view of the above, it is respectfully submitted that none of the references alone or in combination make the present invention, as defined in claim 1, obvious, and the present invention is patentable over such references.

Claims 2-4 depend on claim 1 and are allowable for the same reasons claim 1 is allowable, and further because of specific features recited therein


which, when taken alone and/or in combination with features recited in claim 1, are not disclosed or suggested in the prior art.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

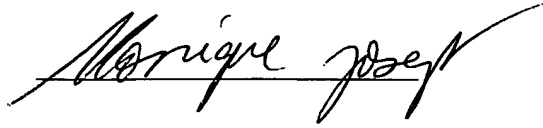


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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail and addressed to:
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A handwritten signature in cursive script, appearing to read "Morigne Joseph", written over a horizontal line.